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Closure #: (Outgoing Correspondence Control #, if applicable)

Due Date

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Originator Name

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Document Classification Review Waiver Per Classification office

T. G. Hedahl
Kaiser-Hill Director

Document Subject: KH00003NS1A

TRANSMITTAL - MODIFICATION OF PRESENT LANDFILL PASSIVE SEEP INTERCEPTION – AMT-003-97

JANUARY 17, 1997 97-RM-ER-0005-KH

Discussion and/or Comments:

On November 25, 1996, DOE transmitted a document entitled "Present Landfill Passive Seep Interception and Treatment System Operational Framework." The operational framework was intended to clarify issues regarding the management and operation of the seep intercept system. Specifically, it had been determined that some of the compounds listed in the original PAM would not be effectively treated using the Granular Activated Carbon (GAC)-based treatment system. For that reason, an abbreviated list of target compounds was presented in the operational framework as "Performance Objectives."

Subsequent to transmitting the operational framework, sampling results showed that vinyl chloride also has very limited treatability with GAC. If the GAC is changed out as soon as vinyl chloride is detected in the treatment system effluent at levels above the 2.0 ug/l Performance Objective, frequent carbon changeout (~ one drum weekly) and substantial F039 hazardous waste generation will result. This conclusion is supported in reference sources which estimate vinyl chloride removal efficiency at 0.01mg/gm using GAC.

It is proposed to use the other compounds listed as Performance Objectives to trigger carbon changeout. This is appropriate for two reasons. First, the limited affinity of vinyl chloride for GAC does not compromise the effectiveness of the GAC in removing other target compounds from the influent stream. In effect, the GAC will continue to remove other organic constituents present in the influent long after the capacity of the GAC to remove vinyl chloride is exhausted. If vinyl chloride breakthrough is disregarded, GAC changeout is expected every three to six months.

Second, vinyl chloride was not detected in the landfill pond prior to installation of the Passive Seep Interception and Treatment System. (See Operable Unit 7 Revised Draft IM/IRA Decision Document and Closure Plan, March 1996.) This is not surprising as vinyl chloride is an extremely volatile constituent, and is only present in the seep and in the treatment system effluent at trace concentrations (3-11ppb). As a result, disregarding vinyl chloride breakthrough will not cause an exceedance of the Action Level Framework (ALF) surface water standard.

In summary, the purpose of this letter is to convey the intent to remove vinyl chloride from the "Performance Objectives" listed in the operational framework. The action will not result in exceedances of Action Level Framework surface water standards. The action will allow for the most effective use of the GAC and will support waste minimization efforts. Unless concerns are voiced, operation of the system will continue in accordance with the provisions stated in this memorandum.

Ann K. Sieben

A-OU07-000467
ADMIN RECORD

If you have any questions, please feel free to contact Russ Cirillo at X5876.

JRC:slm

cc:
J. R. Cirillo
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MODIFICATION OF PRESENT LANDFILL PASSIVE SEEP INTERCEPTION - TGH-XXX-97

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T. G. Hedahl
Title

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J. R. Cirillo - Bldg. T891B
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Date

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MODIFICATION OF PRESENT LANDFILL PASSIVE SEEP INTERCEPTION - XXX-XXX-97

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Contact
Title

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cc:
J. R. Cirillo - Bldg. T891B
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MODIFICATION OF PRESENT LANDFILL PASSIVE SEEP INTERCEPTION - XXX-XXX-97

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